ONE LANE WIDTH PATCH (left detail)

- Existing Pavement
- Existing Joint
- ④ 'B' Joint
- Remove Existing Pavement
- 'RD' Joint ⑧
- 'RD' Joint ⑧
- 6'-10'

ONE LANE WIDTH PATCH

ONE LANE WIDTH PATCH (plan)

- ③ Match Existing Joint Spacing ③
- U.A.C. Existing Lane
- 'CD' Joints
- 'BT-3' Joint
- ⑨
- ②
- ① ①
- 10' or more ⑤
- May require 'CD' and/or 'CT' joints

ONE LANE WIDTH PATCH

FULL ROADWAY WIDTH PATCH (left detail)

- Existing Pavement
- Remove Existing Pavement
- Existing Joint
- 'KT-2' Joint
- 'RD' Joint ⑧
- 'RD' Joint ⑧
- 6'-10'

FULL ROADWAY WIDTH PATCH

FULL ROADWAY WIDTH PATCH (plan)

- ③ Joint Spacing ①
- 'RD' Joint ⑧
- 'KT-2' Joint
- 'CD' Joint
- ③
- If more than 10'
- May require 'CD' joints
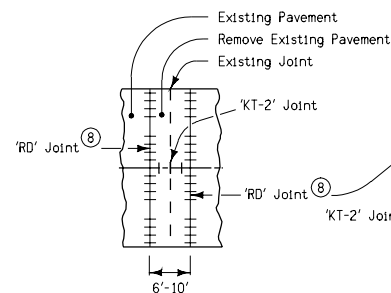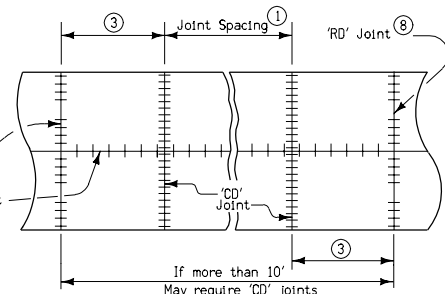
FULL ROADWAY WIDTH PATCH

DETAIL FOR 'RT' OR 'RD' JOINT BAR SPACING

- Internal edge of travel lane
- 'RD' or 'RT' Joint
- 12"
- ℄
- Bars
- 4 at 12" Spacing
- Variable
- Lane (Paint) Line
- 4 at 12" Spacing
- Outer edge of lane 12' or less
- 2'
- 6"
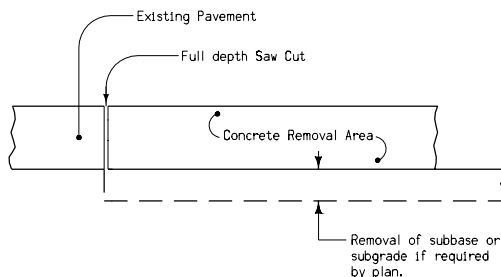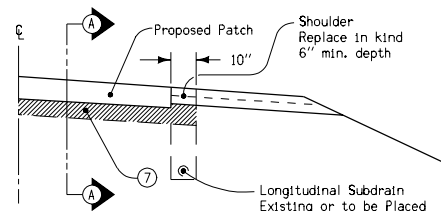- Outer edge of lane greater than 12'

DETAIL FOR 'RT' OR 'RD' JOINT BAR SPACING

TYPICAL HALF PLAN

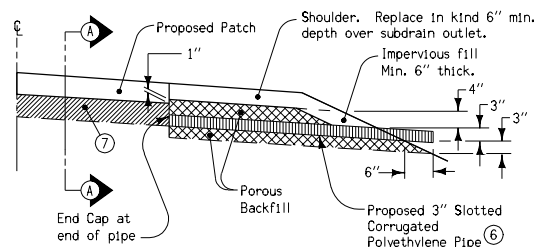For interior lanes, place first bar 12" from ege of lane (slab).

PAVEMENT REMOVAL DETAILS

- Existing Pavement
- Full depth Saw Cut
- Concrete Removal Area
- Removal of subbase or subgrade if required by plan.

PAVEMENT REMOVAL DETAILS

GRANULAR SUBBASE AND SUBDRAIN (with subdrain)

- ℄
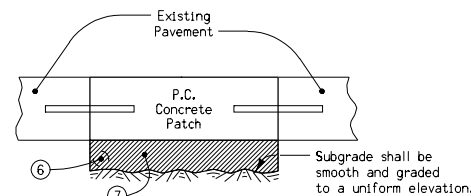- Ⓐ
- Proposed Patch
- Shoulder Replace in kind 6" min. depth
- 10"
- ⑦
- Longitudinal Subdrain Existing or to be Placed
- Ⓐ

GRANULAR SUBBASE AND SUBDRAIN
(WHEN REQUIRED BY PLAN)
IF LONGITUDINAL SUBDRAIN IS PRESENT OR IS TO BE PLACED

GRANULAR SUBBASE AND SUBDRAIN (without subdrain)

- ℄
- Ⓐ
- Proposed Patch
- Shoulder. Replace in kind 6" min. depth over subdrain outlet.
- 1"
- Impervious fill Min. 6" thick.
- 4"
- 3"
- 3"
- ⑦
- 6"
- Porous Backfill
- End Cap at end of pipe
- Proposed 3" Slotted Corrugated Polyethylene Pipe ⑥
- Ⓐ

GRANULAR SUBBASE AND SUBDRAIN
(WHEN REQUIRED BY PLAN)
WITHOUT LONGITUDINAL SUBDRAIN

SECTION A-A

- Existing Pavement
- P.C. Concrete Patch
- ⑥
- ⑦
- Subgrade shall be smooth and graded to a uniform elevation.

SECTION A-A

PARTIAL ROADWAY WIDTH PATCH

- Possible Joint
- ⑧
- 'CD' Joint
- 'BT-3' Joint ⑧
- 'RT' Joint ⑧
- 'RT' Joint ⑧
- 5.0' Min.
- 10' or more
- 5.0' Min.
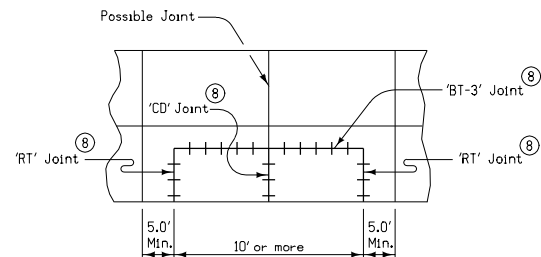
PARTIAL ROADWAY WIDTH PATCH

GENERAL NOTES:

Refer to Standard Road Plans RH-50 and RH-51 for details of joint construction.

All patches shall be rectangular even when existing pavement joints are skewed.

① Joint spacing 10 ft. minimum, 20 ft. maximum, 15 ft. optimum.

② Mid panel joint shall be either a 'CT' or a 'CD' joint. If there is no existing joint or crack in the adjacent pavement, place a 'CT' joint. If there is an existing joint or crack in the adjacent pavement, place a 'CD' joint at the same transverse location.

③ New 'CD' Joint must be a minimum 5 ft. from the patch end.

④ Requires full depth saw cut. Place 1/2" preformed joint material between patch and concrete in adjacent lane.

⑤ If one lane patch exceeds 50 ft., both lanes should be considered for patching.

⑥ If longitudinal subdrain (shoulder) is not to be placed or if not present on side of roadway to be patched, then place proposed 3 inch slotted corrugated pipe at low end of patch.

⑦ 6 inches granular subbase if required by plan. When placed, granular subbase should extend over longitudinal subdrain, if present.

⑧ The joint shall be sawed and sealed after patching. Refer to RH-50 for joint details.

⑨ If this joint is across from an existing crack or joint, then use 'RD' joint, otherwise use 'RT' joint. The joint shall be sawed and sealed after patching. Refer to RH-50 for joint details.

BAR SIZE TABLE

Existing PCC Pavement Thickness	Less than 8"	8" but less than 10"	10" or More
DOWEL SIZE	¾"	1¼"	1½"
TIE BAR SIZE	#6	#10	#11

Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN | **RR-4**

REVISION: Add details for partial roadway width patch

	REVISION NO. 1
William J. Stein	REVISION DATE
APPROVED BY DESIGN METHODS ENGINEER	10-29-02

FULL DEPTH P.C. CONCRETE PATCH WITH DOWELS (EXISTING NON-COMPOSITE PAVEMENT)